

Claims

1. An apparatus for moving pipes which apparatus comprises
 - (i) a stinger slidably mounted on a frame which stinger comprises a rod or tube the
5 end of which is adapted to fit within the pipe to be moved
 - (ii) a gripping means on the end of the stinger which is inserted into the pipe and
which gripping means is adapted to grip the pipe
 - (iii) a drive means which drives a screw threaded sub which drive means is adapted to
slide along said stinger so that the screw threads on the sub can engage the screw
10 threads on the end of the pipe and
 - (iv) moving means adapted to move the sub and a pipe attached to the sub along the
frame
2. An apparatus as claimed in claim 1 in which there is a sealing means between the
15 sub and the stinger, whereby the well pressure is contained while the sub slides along
the stinger when in drilling mode.
3. An apparatus as claimed in claim 1 or 2 in which the frame is incorporated in or is
a mast.
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4. An apparatus as claimed in claim 1 to 3 in which the stinger is mounted on a
stringer carriage which can slide along the frame or mast.
5. An apparatus as claimed in any one of claims 1 to 4 in which the sub is driven by a
25 drive carriage which can slide along the stinger and there is a seal between the drive
carriage and the stinger.
6. An apparatus as claimed in any one of claims 1 to 5 in which the sub is driven by a
drive carriage which can slide along the stinger and there is a seal between the sub
30 and the drive carriage and between the drive carriage and the stinger.

7. An apparatus as claimed in any one of claims 1 to 6 in which there is a guide which supports and centralises a tubular whilst it is pulled onto stinger and whilst it is being transported.

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8. An apparatus as claimed in any one of the preceding claims in which the mast can be moved by a gantry from a horizontal position to a substantially vertical position.

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9. An apparatus as claimed in claim 8 in which when a tubular is removed from a container onto the frame there are means to move the frame over a well head so that an end of the tubular is positioned over the well head and there are joining means whereby the tubular can be connected to the well string in the well head.

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10. An apparatus as claimed in any one of the preceding claims in which there is a reader means incorporated in the end of the stinger inserted in the pipe whereby information contained on the inside of the pipe can be read.

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11. An apparatus as claimed in any one of the preceding claims adapted to receive an ISO container and locating means to locate the container so that a tubular contained in the container can be lined up with the stinger so that the end of the stinger can be inserted into the tubular.

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12. An apparatus as claimed in claim 11 in which the tubulars are stacked in the ISO container in a diamond formation and in contact with a foam protective layer.

13. An apparatus as claimed in claim 11 in which the tubulars are stored in the ISO container in a diamond formation within pipes set in foam within the ISO container.

14. An apparatus as claimed in any of the preceding claims in which the stinger can withstand the majority of the force caused by the pressure within the wellhead, while the Tubular is 'snubbed' into the wellhead with a relatively small force.

5 15. An apparatus claimed in any one of claims 11 to 14, wherein all tubulars and tubular assemblies including all components normally introduced into a well bore are stored and transported to the wellhead area within ISO containers and from ISO containers to the wellhead by stingers of a plurality sizes.

10 16. An apparatus claimed in claim 15, wherein the whole operation can take place under water

15 17. An apparatus claimed in claim 16, wherein the ISO containers remain in the vertical from launching into the water to being landed on the seabed base structure and the X Y axes, for accessing the tubulars stored in the ISO containers, are both horizontal and the Stinger and mast remain in the vertical for both drilling and warehousing modes.